

FY2016

MICHIGAN PERFORMANCE PLAN

As Michigan's traffic safety partners move forward with efforts to decrease traffic fatalities and serious injuries, we reflect on the past performance of goals over the past five years. Underlying trends are influenced by many variables, including but not limited to, the amount of miles traveled on the roadways, the economy, weather, and safety improvements in vehicles, infrastructure, and emergency medicine.

The Office of Highway Safety Planning (OHSP), with technical assistance from the University of Michigan Transportation Research Institute (UMTRI), uses the latest traffic crash data to examine past trends in order to estimate future performance using a predictive model approach. Based on an analysis of the 2010-2014 traffic crash data, 2013 was an unusually low year in some categories. This results in predictions, which actually indicate an upward trend in traffic crashes in some areas. If aggressive and innovative countermeasures are not implemented, the upward predicted trend could come to fruition.

Saving lives through improvements in key traffic safety areas such as impaired driving crashes and restraint use is a constant goal. Seat belt use is 93.3 percent. Crashes involving alcohol and drugs have decreased, as well as crashes involving young drivers, bicycles, motorcycles, and pedestrians.

Despite these improvements, people continue to die and sustain serious injuries on Michigan's roads. Preventing these deaths and serious injuries is the challenge that calls Michigan's traffic safety partners into action to implement cutting-edge countermeasures for traffic safety.

The goal of reducing, and eventually eliminating, fatalities and injuries on Michigan's roads drives the annual planning process that culminates in the creation of the annual Highway Safety Plan (HSP). The plan that follows is the blueprint for saving lives and reducing injuries. This year's blueprint begins with a brief look at Michigan's demographics, which provides the background within which traffic safety solutions are identified, implemented, and evaluated. As in the past, the HSP details the major traffic crash problems, identifies the most effective countermeasures to address them, and reports on the partners selected to implement the countermeasures.

State Demographics

Michigan is geographically located in the Great Lakes region of the midwestern United States. It is the ninth most populous state in the nation with the 11th most extensive total area. It is the largest state by total area east of the Mississippi River.

Michigan has the longest freshwater coastline of any political subdivision in the world, being surrounded by four of the five Great Lakes in addition to Lake St. Clair. It is the

only state to consist of two peninsulas. The landmasses are separated by the Straits of Mackinac, which is a five-mile channel that joins Lake Huron to Lake Michigan. The peninsulas are connected by the Mackinac Bridge, which is the longest suspension bridge in the western hemisphere measuring at 26,372 feet.

The United States Census Bureau estimates that the population of Michigan in 2014 was 9,909,877; 51 percent are female and 49 percent are male. Fifteen percent are over age 65 and 23 percent are under 18 years of age.

Michigan has 83 counties. It has 9,716 miles of trunk line roads, 89,775 miles of county roads, and 20,785 miles of city and village streets. Highway M-135 on Mackinac Island is the only state highway in the nation where motor vehicles are banned. More than 96 billion miles are driven on Michigan roadways every year, the equivalent of more than 500 round trips from the Earth to the moon every day. There are nearly seven million licensed drivers in Michigan as well as over eight million registered vehicles.

PROCESS DESCRIPTION

PROGRAM PURPOSE: REDUCE FATALITIES, INJURIES, AND CRASHES

With each new year of planning comes a renewed commitment by the OHSP staff to reduce traffic fatalities and injuries. Staff utilize the vast body of traffic crash data and research in combination with the experience of traffic safety professionals from a variety of disciplines to select the most effective countermeasures.

The key to continued progress is maintaining a focus on what will save the most lives and prevent the most injuries. Limited resources call for strategies to be implemented where they will be most effective, with attention to geographical circumstances, and monitored for impact. Success is measured against goals and benchmarks for fatality and injury reduction.

OHSP staff cannot pursue these programs without the participation of partners at the national, state, and local levels. This cooperative approach helps ensure that in Michigan efforts are coordinated among enforcement, engineering, education, and emergency medical services into comprehensive traffic safety programs that save lives.

Pre-planning Steps

Implementation of one year's HSP occurs in conjunction with planning for the next. Planning begins with an "after action review" of the previous year, identifying successful areas, those in need of improvement, and those changes that will yield greater success. It also involves brainstorming among staff members on what new strategies might show promise in the new year, along with a review of effective countermeasures. OHSP then makes any necessary revisions to the planning process and calendar (Exhibit 1). This pre-planning ensures that OHSP's program development remains dynamic and responsive to changes in the traffic safety environment.





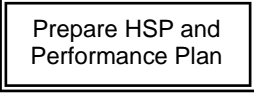


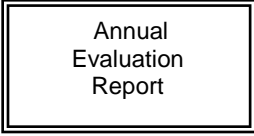
Each step of the planning process is identified as follows:

1. Problem Identification
2. Goal Determination and Analysis
3. Performance Measures
4. Traffic Safety Partner Input
5. Budget Development
6. Project Selection

Plan Organization

The performance plan development follows the steps of OHSP's planning process. Crash data analysis, research, and consultation with program partners and stakeholders continue throughout each step. Program and financial staff meet monthly at HSP planning meetings and exchange information about program activities. Grant and revision activity is monitored to ensure programs remain on-track for successful completion. OHSP staff members incorporate emerging information into program development and implementation whenever possible and continue to look to the future for emerging ideas and opportunities.

EXHIBIT 1 – HSP Planning Outline

FY2016 HSP PLANNING CALENDAR		
ACTION	DATES	DETAILS
	NOVEMBER DECEMBER	<ul style="list-style-type: none"> ❖ Review past year's activity ❖ Review current year's activity ❖ Review crash data ❖ Review state and national priorities ❖ Update problem identification ❖ Quantify goals
	JANUARY FEBRUARY	<ul style="list-style-type: none"> ❖ Meet with program partners, obtain input ❖ Review planning session output ❖ Review data specific to the program ❖ Review quantitative goals ❖ Outline grant opportunities ❖ Identify long-term strategies (>three years)
	MARCH APRIL	<ul style="list-style-type: none"> ❖ Consult with current and prospective grantees ❖ Program area presentations ❖ Create draft Grant Development Plans ❖ Establish draft budget ❖ HSP management team reviews programs and budgets
	MAY JUNE	<ul style="list-style-type: none"> ❖ GDPs finalized ❖ HSP budget finalized ❖ Notify grantees of grant timelines ❖ Create draft HSP ❖ Create draft performance plan
	JUNE	<ul style="list-style-type: none"> ❖ Administrative review of performance plan ❖ Administrative review of HSP ❖ Approve FY2016 performance plan and HSP ❖ Distribute to NHTSA
	JULY AUGUST	<ul style="list-style-type: none"> ❖ Monitor grant development process ❖ Send grantees grant templates ❖ Create in-house grants ❖ Begin grant entry in e-grants ❖ Begin annual evaluation report
	SEPTEMBER OCTOBER	<ul style="list-style-type: none"> ❖ Approve and start implementation of FY2016 grants. ❖ Conduct grant orientation meetings
	NOVEMBER	<ul style="list-style-type: none"> ❖ Annual evaluation report prepared for FY2015 HSP

1. PROBLEM IDENTIFICATION

The annual highway safety planning process begins in November with comprehensive crash data analysis. OHSP cannot approach the programming process and address traffic safety problems unless there is a full understanding of the crash data and what problems exist. OHSP looks at many variables such as the location and time of the crash, driver, environmental elements, and various mitigating factors to determine emerging and current issues.

An initial review of the data highlights those factors that contribute to a high percent of fatalities and incapacitating injuries. These are key variables that cannot be ignored. Goals established to address them are listed in the next section. Additional factors may be considered such as severe but non-life-threatening injuries, increasing trends that could potentially increase fatalities and incapacitating injuries, or “low-hanging fruit” for which strong countermeasures exist and which may have relatively large room for improvement.

Data analysis continues year-round, with intensified efforts early in the HSP and grant development plan process. The timeliness, accuracy, and accessibility of Michigan traffic crash data allows current information to be incorporated into program development and implementation. Examples include times of the year that have the most alcohol-involved crashes, how driver age affects fatal crash rates, which areas of a given county have the most nighttime crashes, or the demographics involved in fatal and serious injury motorcycle crashes.

OHSP staff, working with various traffic safety partners, have access to a variety of tools during problem identification. Authorized agencies can access the crash database directly through a variety of interfaces, including Websites and query tools. For the general public, the University of Michigan Transportation Research Institute (UMTRI) Transportation Data Center hosts the OHSP-sponsored Michigan Traffic Crash Facts (MTCF) Website: www.michigantrafficcrashfacts.org. This Website includes more than 100 tables addressing the most common crash data needs including an archive dating back to 1992. The Website also includes fact sheets for state and county data, and a query tool allowing users to build their own data queries, mapping tools, charts, tables, and GIS capability. MTCF users also have access to sanitized traffic crash reporting UD-10 forms submitted to the Michigan State Police Criminal Justice Information Center (CJIC) Crash Section by law enforcement officials.

The OHSP problem identification process is based on trend data reported from the previous five years. Data analysis is conducted for OHSP by an independent outside source to ensure that no bias is attached to the results. For Fiscal Year 2016 planning, OHSP’s problem identification was conducted by research statisticians from UMTRI.

In addition, the Wayne State University Transportation Research Group provides assistance researching and formulating Michigan’s State Strategic Highway Safety Plan (SHSP) located at www.michigan.gov/msp. The collaboration of the HSP and the

SHSP ensures not only uniformity of the top goals in Michigan, but also includes a unique diversity of working groups among Michigan's traffic safety stakeholders working toward the SHSP vision of "Toward Zero Deaths on Michigan Roadways."¹

In addition, in partnership with the Michigan Department of Transportation (MDOT), there is an assurance that the mandated goals of fatalities, incapacitating injuries, and the fatality vehicle miles traveled (VMT) rate are identical.

2. GOAL DETERMINATION AND ANALYSIS

Goals are statements of program intent or purpose, consistent with the mission of the organization. The 2016 performance plan introduces new goals for 2015-2017 based on trend data analysis from the previous five years 2010-2014. Target areas are the top factors involved in fatal and incapacitating injury crashes, along with emerging issues. Quantitative targets are set through crash projections based on five-year crash trends using a regression predictive statistical model. UMTRI also assisted with the development of the goals in order to provide objective analyses throughout the planning process.

This section begins with a summary of Michigan traffic crash statistics from 2010 through 2014 (the most current data available). OHSP's revised long-term goals through 2017 follow, along with annual benchmarks.

Crash Data Comparison (2010-2014)

	2010	2011	2012	2013	2014	Percent Change 10-14
Total Crashes	282,075	284,049	273,891	289,061	298,699	+6%
Fatal Crashes	868	834	870	881	806	-7%
People Injured	70,501	71,796	70,519	71,031	71,378	+1%
People Killed	937	889	936	951	876	-7%
Fatality Rate (100M VMT)	1.0	.9	1.0	1.03	.93	-7%
Fatal Crash Rate (100M VMT)	.9	.9	.9	.95	.86	-4%
VMT (Billions)	97.6	94.8	94.3	95.1	94.1	-4%
Registered Vehicles (Millions)	8.10	8.13	8.10	8.17	8.21	+1%
Population (Millions)	9.88	9.88	9.82	9.90	9.91	0%

¹ State of Michigan Strategic Highway Safety Plan 2013-2016

The 2014 crash numbers were down in several categories and up in others showing a low performance year based on comparisons from 2010-2014.

In each of the following tables, a predictive model analysis was applied to each crash category based on the identified trends.² Due to some low performances in 2014, smaller decreasing increments (one percent) were used in the table as goals in order to deflect the actual increases that were predicted.

For example, fatalities and serious injuries for drug-involved crashes were 378 in 2014. The trend analysis indicated that in 2015 it would increase to 382.

A goal of 1 percent decrease was selected in order to stop the upward trend. The new goals for 2015-2017 would be 374, 370, and 366, respectively.

Fatalities and serious injury goals remain the same in order to reflect the goals set in the Michigan State Highway Safety Plan.

² University of Michigan Transportation Research Institute

EXHIBIT 2: OHSP FY2016 Goals at a Glance

Data Types	2010 actual	2011 actual	2012 actual	2013 actual	2014 actual	2015 goal	2016 goal	2017 goal
Fatalities	942	889	940	947	876	781	750	726
*Fatalities per 100 million vehicle miles traveled	.97	.94	.99	1.00	.94	.87	.86	.83
*Injuries (A,B,C)	70,501	71,796	70,518	71,031	71,378	71,342	70,629	69,923
Fatalities and incapacitating injuries (KAs)	6,917	6,595	6,612	6,234	5,785	5,641	5,379	5,116
*KAs involving alcohol	1,326	1,253	1,320	1,214	1,016	1,009	999	989
*KAs involving drugs	451	404	410	437	378	374	370	366
Fatalities to unrestrained vehicle occupants	206	194	229	187	191	190	187	183
Observed daytime safety belt use (front seat occupants)	95.2%	94.5%	93.6%	93%	93.3%	98%	98%	98%
KAs to vehicle occupants ages 0 to 8	108	105	124	84	73	72	62	53
KAs at intersections	2,351	2,158	2,187	2,005	1,861	1,773	1,659	1,546
KAs involving lane departure	2,750	2,688	2,612	2,535	2,254	2,224	2,110	1,995
KAs on local roads	4,165	3,877	3,914	3,525	3,291	3,124	2,914	2,704
*KAs involving motorcycles	778	695	794	712	634	628	622	616
KAs to pedestrians	534	554	482	529	513	502	496	489
*KAs to bicyclists	192	174	191	194	156	154	153	152
KAs to men	4,005	3,730	3,815	3,618	3,301	3,238	3,086	2,934
KAs involving drivers ages 15 to 20	1,567	1,506	1,382	1,186	1,036	921	783	644
*KAs involving drivers ages 21 to 24	991	978	1,009	991	883	874	865	856
*KAs involving drivers ages 65+	1,102	1,050	1,135	1,094	1,104	1,093	1,082	1,071
KAs from 3 p.m. to 6 p.m.	1,363	1,405	1,396	1,275	1,188	1,181	1,133	1,085
KAs from midnight to 3 a.m.	677	618	608	523	524	470	430	390
*KAs from noon Friday to noon Sunday	2,263	2,234	2,258	2,161	1,973	1,953	1,934	1,915
KAs from July to September	2,124	2,004	1,992	1,952	1,799	1,764	1,693	1,623

*Predictions based on a trend analysis predictive model indicated these performance areas would increase in 2015-2017. In order to stop the trend, a 1 percent decrease was applied to each year.

Traffic Fatalities

The most important traffic safety goal is to reduce, and eventually eliminate, traffic fatalities. Other factors may be considered, but the final measure of success must always be the lives of people. According to UMTRI³, the comprehensive cost of one traffic fatality in Michigan is more than \$3.6 million. This does not take into account the precious life lost and the loved ones left behind.

In 2014, fatalities decreased 8 percent to 876. The Statistical Abstract of the United States lists 1924 as the last year with fewer than 871 Michigan traffic fatalities. There were 863 in 1924, so Michigan's goal is to get below the 1924 fatality count, downward on the path towards zero deaths.

Fatalities and Incapacitating Injuries (KAs)

Fatal and incapacitating injuries are the most consistent measure of severe crashes available for traffic safety planning. Fatal and incapacitating injuries include crashes with the greatest harm and happen in large enough numbers to perform meaningful analysis. Michigan classifies injuries according to the KABCO scale: K=fatal; A=incapacitating; B=non-incapacitating; C=possible; and 0=none (property damage only).

Traffic Fatalities (K) ⁴					
Year	Actual		Year	Goal	Actual
2010	942		2014	806	94
2011	889		2015	781	
2012	940		2016	750	
2013	947		2017	726	

Incapacitating Injuries (A) ⁵					
Year	Actual		Year	Goal	Actual
2010	5,980		2014	5,077	4,909
2011	5,706		2015	4,914	
2012	5,676		2016	4,800	
2013	5,283		2017	4,646	

³ UMTRI -2011-21 "Societal Costs of Crime and Crashes in Michigan: 2011 Update (Kostyniuk, LP, Molnar, LJ, St. Louis, RM, Zanier, N and Eby, DW)

⁴ This data is from the FARS database located at http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncaa/STSI/26_MI/2013/26_MI_2013.htm. The data matches the Michigan State Highway Safety Plan 2012-2016.

⁵ This data is from the state database.

*Pending FARS data release for 2014

Vehicle Mileage Fatality Rate

The Vehicle Miles Traveled (VMT) fatality rate adjusts the worst outcome of a crash by a common exposure variable. This is defined as how many people have died in a vehicle related crash compared to the total number of miles driven on Michigan roads by motorists. The VMT fatality rate has been a consistent measure used nationally for many years, and provides a reliable means of tracking progress over a long period of time.

If fatalities are decreasing while miles driven are increasing, the state is getting safer faster than the simple fatality count suggests. If both are decreasing, then some of the improvement is just a factor of people driving less. If miles driven are decreasing while fatalities are increasing, then a closer examination of the data is warranted for problem identification.

The VMT rate is estimated each year because the rate is not available until July. The Michigan Department of Transportation revised the VMT calculation process for 2007, suggesting that previous years may have underestimated VMT. The final effects of this change may bear future consideration.

VMT Fatality Rate ⁶					
Year	Actual		Year	Goal	Actual
2010	.97		2014	.89	.94
2011	.94		2015	.87	
2012	.99		2016	.86	
2013	1.00		2017	.83	

Traffic Injuries

While Michigan strives to achieve zero traffic fatalities, it also seeks to decrease the severity of traffic-related injuries. Crash avoidance seeks to reduce crashes entirely with no crashes, fatalities, or injuries as the goal. Crash mitigation seeks to reduce the severity of crashes in relation to injuries.

Traffic Injuries (A,B,C)					
Year	Actual		Year	Goal	Actual
2010	70,501		2014	70,321	71,378
2011	71,796		2015	71,342	
2012	70,518		2016	70,629	
2013	71,031		2017	69,923	

⁶ This number is the number of fatalities (people) per 100 million vehicle miles traveled. This data is from the FARS database located at http://www-nrd.nhtsa.dot.gov/departments/nrd-30/nrsa/STSI/26_MI/2013/26_MI_2013.htm. The data matches the Michigan State Highway Safety Plan 2012-2016.

*Pending FARS data release for 2014

Alcohol-Impaired and Drug-Impaired Driving⁷

Impaired-driving involved crashes are disproportionately more severe than other crashes, constituting 46 percent of fatal crashes from 2010 to 2014. Despite decades of education and enforcement efforts, impaired driving remains a devastating traffic safety and public health problem. While some drivers are alcohol-impaired or drug-impaired, some drivers are both.

KAs involving alcohol					
Year	Actual		Year	Goal	Actual
2010	1,326		2014	1,191	1,016
2011	1,253		2015	1,009	
2012	1,320		2016	999	
2013	1,214		2017	989	

KAs involving drugs					
Year	Actual		Year	Goal	Actual
2010	451		2014	433	378
2011	404		2015	374	
2012	410		2016	370	
2013	437		2017	366	

Increased levels of scientific analysis of blood samples of drivers suspected to be under the influence of drugs began in 2008, so previous years' results may not provide a consistent basis for comparison. Recorded drug-involved crashes are more likely to increase due to updated training for law enforcement officers such as the Advanced Roadside Impaired Driving Enforcement (ARIDE) and Drug Recognition Expert (DRE) programs.

Safety Belt Use

Safety belts are the most effective means of reducing injury severity and preventing death in the event of a crash. Increasing use of safety belts substantially improves crash survivability and reduces societal costs of crash-involved injuries.

Unrestrained fatalities follow changes in the observed safety belt use rate, but note the percentage of restrained people killed is much higher than the percentage of unrestrained people. This is partly due to the life-saving effect of belts, partly to lower risk-aversion among people who do not use safety belts, and partly to differences in observed use and actual use. In compliance with federal guidelines, Michigan observes daytime front-seat occupants in areas covering at least 85 percent of the state's population.

⁷ Alcohol or drug impaired involved crashes are coded from the UD-10 Michigan Crash Report as crashes where at least one person involved has been drinking or taking drugs; the person drinking or taking drugs could have been a driver, a passenger, a pedestrian, or a bicyclist.

Michigan had the highest safety belt use rate in the nation in 2009 at 97.9 percent. OHSP set a benchmark goal of 98 percent.

Fatalities to unrestrained vehicle occupants⁸					
Year	Actual		Year	Goal	Actual
2010	206		2014	185	191
2011	194		2015	190	
2012	229		2016	187	
2013	187		2017	183	

Safety belt use⁹					
Year	Actual		Year	Goal	Actual
2010	95.2%		2014	98.0%	93.3%
2011	94.5%		2015	98.0%	
2012	93.6%		2016	98.0%	
2013	93.0%		2017	98.0%	

Child Passenger Safety

Safety belts are designed for adults. Children less than eight years of age, or less than 4'9", need a booster seat for the belt to fit properly. Children under four years of age need a child restraint (child safety seat). Parents sometimes do not know the right seat to use, how to install it properly, or why it is necessary. Officers may not have much more training than the parents, making it sometimes difficult to observe violations of child safety seat laws. As a result, children are often under-protected in a crash.

The effects of child passenger safety show up more in crash-injury than crash-fatality data. The belt alone is often enough to prevent a death, but the proper child restraint is what keeps the crash from causing massive internal injuries, particularly to the neck, spine, and intestines.

KA injuries, passenger vehicle occupants ages 0-8¹⁰					
Year	Actual		Year	Goal	Actual
2010	108		2014	84	73
2011	105		2015	72	
2012	124		2016	62	
2013	84		2017	53	

⁸ Unrestrained fatalities are coded from the UD-10 Michigan Crash Report as crashes including all occupant fatalities in all motor vehicles and excludes pedestrians and bicyclists. Unknowns or unavailable are not included.

⁹ Daytime front seat observed occupants of motor vehicles as reported in the Michigan Direct Observation Safety Belt Survey.

¹⁰ Includes passenger vehicles, vans, pick-up trucks and small trucks under 10,000 pounds.

Intersection Crashes

While most drivers can keep a car going in a straight line, problems occur when vehicles interact with each other at intersections. The severity of intersection crashes is exacerbated by the risk of angle (T-bone) collisions during turns. About one-third of all crashes happen in or near intersections. Of this one-third in 2014, 49 percent occurred at signalized intersections, 26 percent at sign-controlled intersections, and 25 percent occurred at intersections with no traffic control.

Intersection crash problems can be related to engineering, driver behavior, or exposure. Any program working to improve safety in urban areas will necessarily affect intersection crashes.

KAs at intersections ¹¹					
Year	Actual		Year	Goal	Actual
2010	2,351		2014	1,894	1,861
2011	2,158		2015	1,773	
2012	2,187		2016	1,659	
2013	2,005		2017	1,546	

Lane Departure

Most fatal crashes happen when a car leaves its lane. The driver steers into a ditch, misses a turn, crosses the centerline, or otherwise puts the car into conflict with another vehicle or roadside object. "Lane departure" includes not just roadway departure, but also sideswipes and highly dangerous head-on crashes.

Lane departure is connected to drunk, drowsy, and distracted driving. Any sort of impairment makes someone more likely to drift or miss a turn. Focused and attentive driving are keys to avoiding a vehicle crash.

KAs involving lane departure ¹²					
Year	Actual		Year	Goal	Actual
2010	2,750		2014	2,428	2,254
2011	2,688		2015	2,224	
2012	2,612		2016	2,110	
2013	2,535		2017	1,995	

¹¹ Intersections are coded on the UD-10 Michigan Traffic Crash Report as within an intersection, intersection driveway related or within 150 feet of nearest edge of an intersection or intersection related-other.

¹² Lane departure crashes are coded from the UD-10 Michigan Crash Report as crashes involving single or multiple or parked motor vehicle that leaves its lane.

City-County Roads

While most miles are driven on state roads, most serious crashes happen on local roads. City, county, and local roads, with the majority of intersections and miles of pavement, present a variety of challenges for all aspects of traffic safety.

With most serious crashes taking place on local roads, any efforts directed to prevent or mitigate crashes will affect safety on local roads. Countermeasures targeting a high-crash location is almost certain to take place on local roads.

KAs on local roads ¹³					
Year	Actual		Year	Goal	Actual
2010	4,165		2014	3,378	3,291
2011	3,877		2015	3,124	
2012	3,914		2016	2,914	
2013	3,525		2017	2,704	

Motorcycles

The fatalities and injuries involving motorcycle crashes consistently fluctuate. Motorcycle ridership is increasing at a steady rate both in Michigan and nationally. Rider information suggests young motorcyclists are not seeking proper training and licensure, while older riders are using more powerful motorcycles on which they may have less experience. The largest increase in motorcycle use is among older riders, which also increases the effect of lower crash survivability. Older bodies are even more likely to sustain damage and have diminished ability to recover.

The Michigan Legislature enacted Public Act 98 of 2012 on April 13, 2012, which modified the requirements for helmet usage. Riders 21 years and older, who have more than two years of experience riding a motorcycle and have attended a motorcycle safety course have the option of whether or not to use a helmet. Riders must carry at least \$20,000 in first-party medical benefits. Riders under the age of 21 are still required to use government-approved helmets.

KAs involving motorcycles ¹⁴					
Year	Actual		Year	Goal	Actual
2010	778		2014	682	634
2011	695		2015	628	
2012	794		2016	622	
2013	712		2017	616	

¹³ Local road crashes are coded from the UD-10 Michigan Crash Report as crashes including all crashes involving crashes on county roads, city streets, or unknown.

¹⁴ Motorcycle involved crashes are coded from the UD-10 Michigan Crash Report as crashes where at least one motorcycle was present; other users could have been another motorcyclist, passenger vehicle, truck, van, pedestrian or a bicyclist.

Pedestrians

Pedestrians are approximately 15 percent of traffic fatalities each year. There are relatively few effective behavioral interventions for improving pedestrian safety. Some relate to helping drivers avoid pedestrians, while others strive to keep pedestrians out of harm's way. Due to relatively high exposure, those most likely to be hit are young non-drivers during the day. Due to increased body frailty of seniors and alcohol and drug use by drivers during the evening hours, older pedestrians at night are more likely to be hit and killed.

KAs to pedestrians ¹⁵					
Year	Actual		Year	Goal	Actual
2010	535		2014	501	513
2011	554		2015	502	
2012	482		2016	496	
2013	529		2017	489	

Bicyclists

Bicyclists are approximately 3 percent of traffic fatalities and incapacitating injuries each year. They are over exposed to the elements and to vehicles on the roadways. Successful countermeasures include education about high-visibility clothing and equipment, bicycle laws, and use of bicycle lanes. Educating the motoring public and law enforcement about safety around bicyclists has also proven to help prevent crashes.

KAs to bicyclists ¹⁶					
Year	Actual		Year	Goal	Actual
2010	192		2014	178	156
2011	174		2015	154	
2012	191		2016	153	
2013	194		2017	152	

Men

Most of the risky behaviors that can result in a fatal or serious injury are more common in men. Men buckle up less, drink and drive more, drive faster, and drive motorcycles more frequently. These behaviors are even more prevalent in young men. Federal surveys of travel trips estimate that men do about 61 percent of the nation's driving, so it is expected men are in more crashes.

¹⁵ Pedestrians are coded from the UD-10 Michigan Crash Report as crashes where at least one pedestrian was present; the pedestrian could also be a driver who exited a vehicle, motorcycle, bicycle, etc., a person on horseback or in a horse drawn buggy or a person who was in a wheelchair.

¹⁶ Bicyclists are coded from the UD-10 Michigan Crash Report as crashes where at least one bicyclist was present.

Traffic fatalities are consistently two-thirds or more men. Women, exposed to the same traffic variables, are still seeing the number of serious and fatal injuries fall faster than that of men.

KAs to men ¹⁷					
Year	Actual		Year	Goal	Actual
2010	4,005		2014	3,464	3,301
2011	3,730		2015	3,238	
2012	3,815		2016	3,086	
2013	3,618		2017	2,934	

Young Drivers¹⁸

Younger drivers crash more often due to inexperience and a tendency for greater risk taking. Crash survivability is better in youth because young bodies are not as vulnerable to damage as older vehicle passengers, but poor judgment and making driver errors of greater severity can offset this. Of those killed in crashes with young drivers, about one-third are the drivers themselves, one-third are passengers with a young driver, and one-third are other drivers, passengers, and pedestrians.

Drivers under age 18 participate in Graduated Driver Licensing (GDL), which allows gradual exposure to greater driving demands under structure and supervision. Crash involvement per driver peaks at age 18, with no supervision, more exposure, and still incomplete driving skills. Persons under age 21 may not legally drink, which is not to say that all abstain. Alcohol-involved crashes peak at age 21 with increased opportunity for access to alcohol. As responsibilities increase and brain development subsides in the mid-twenties, crash involvement drops precipitously. By age 25, the most dangerous years are past, and after age 35 risk of crash injury is average.

KAs involving drivers ages 15 to 20					
Year	Actual		Year	Goal	Actual
2010	1,567		2014	1,121	1,036
2011	1,506		2015	921	
2012	1,382		2016	783	
2013	1,186		2017	644	

KAs involving drivers ages 21 to 24					
Year	Actual		Year	Goal	Actual
2010	991		2014	981	883
2011	978		2015	874	
2012	1,009		2016	865	
2013	991		2017	856	

¹⁷ Males are coded from the UD-10 Michigan Crash Report as any male killed or incapacitated in a crash; he could be a driver, passenger, pedestrian, or bicyclist.

¹⁸ Young drivers ages 15-20 and 21-24 are coded from the UD-10 Michigan Crash Report as any crash involving at least one driver age 15-20 or 21-24 ; the driver of the other car may also fall in the any age categories.

Senior Drivers

Michigan is the eighth largest state for the number of drivers age 65 or older per 1.1 million licensed drivers. For each mile traveled, fatal crash rates increase noticeably starting at age 70 and are highest among drivers 85 and older. Senior drivers face slower reaction times and a multitude of other aging-related challenges as they continue to drive in their twilight years.

KAs involving drivers age 65 and older					
Year	Actual		Year	Goal	Actual
2010	1,102		2014	1,072	1,104
2011	1,050		2015	1,093	
2012	1,135		2016	1,082	
2013	1,094		2017	1,071	

Afternoon Rush Hour

High exposure leads to high crash numbers. At the end of the work and school day, there are more cars on the road, with more crashes and fatalities. It is not disproportionately negative, but it is the time when Michigan experiences the most fatalities. The morning rush hour does not show as much of a peak. Late-day drivers are more likely to be tired. This worsens over the week as sleep deprivation builds up, with Friday being the worst at this time slot. Drivers have shorter tempers and attention spans drift after a long day. Dinnertime and “happy hour” are the peak times for alcohol-involvement for drivers over age 21. Restraint use is also lower in the evening than the morning.

KAs from 3 p.m. to 6 p.m.					
Year	Actual		Year	Goal	Actual
2010	1,363		2014	1,242	1,188
2011	1,405		2015	1,181	
2012	1,396		2016	1,133	
2013	1,275		2017	1,085	

Nighttime Driving

Late-night traffic is light, but the crashes are disproportionately severe and likely to involve alcohol. Midnight to 3 a.m. includes bar closing time. It is the peak time for alcohol impaired driving. Alcohol behaves synergistically with drowsiness, making late-night drivers even less alert and competent.

Alcohol involvement starts rising around 9 p.m., but does not begin to spike until midnight. Alcohol-involved crashes peak in the 2 a.m. to 3 a.m. hour, when bars close. After 4 a.m., traffic is too light to have large numbers of crashes.

KAs from midnight to 3 a.m.					
Year	Actual		Year	Goal	Actual
2010	677		2014	499	524
2011	618		2015	470	
2012	608		2016	430	
2013	523		2017	390	

Weekend Driving

Serious crashes spike almost every weekend. Increased alcohol use, nighttime driving, visiting unfamiliar areas, traffic congestion around popular venues, and decreased attention all contribute to a higher rate of serious crashes on Friday and Saturday evenings. Noon Friday to noon Sunday was noted as the peak crash time, which includes both Friday after-work and Saturday night. The Saturday night crash peak actually takes place on Sunday morning (after midnight), while the weekend peak starts early Friday afternoon as people leave work or school.

KAs from noon Friday to noon Sunday					
Year	Actual		Year	Goal	Actual
2010	2,263		2014	2,036	1,973
2011	2,234		2015	1,953	
2012	2,256		2016	1,934	
2013	2,161		2017	1,915	

Summer Travel

Summer months see more miles traveled on Michigan roadways as well as travel to unfamiliar destinations in the state as tourism flourishes during the warmer months. From 2010-2014, August was Michigan's worst month for total fatalities and alcohol-involved fatalities, with July to September as the worst three-month period.

Serious crashes are more common from June to November and significantly less common from January to March.

KAs from July to September					
Year	Actual		Year	Goal	Actual
2010	2,124		2014	1,883	1,799
2011	2,004		2015	1,764	
2012	1,992		2016	1,693	
2013	1,952		2017	1,623	

3. PERFORMANCE MEASURES

OHSP tracks many variables to monitor progress of crash problems and to set program goals. Crash data is key, as discussed in Section 2. Each project also has its own goals, established by program staff in partnership with grantees. Monitoring and evaluation is an ongoing process.

Other publications available for performance measurement include the Annual Evaluation Report (AER) and Michigan Traffic Crash Facts.

NHTSA and the Governors Highway Safety Association (GHSA) have agreed on a minimum set of performance measures to be used by state and federal agencies in the development and implementation of behavioral highway safety plans and programs. Those measures are detailed in the table on the following page.

All fatality numbers are from the Fatal Analysis Reporting System (FARS), with the rest coming from state databases and surveys. Goals are copied from Section 2 or set by the same procedure. Goals are set from the normalized trend values to reduce the effects of annual variation. That is, if last year was unusually good for a program area, next year's goal should realistically assume some regression to the mean.

FARS data for 2014 was not available before the FY2016 Performance Plan was finalized. The relevant boxes have been left blank for later completion.

Traffic Safety Performance Measures for States and Federal Agencies Crash Data and Goals

	Actual						Goal	
	2010	2011	2012	2013	2014	5 year Average	2015	2016
**Traffic fatalities	942	889	940	947	Pending	<i>Pending</i>	781	750
*Serious ("A") Injuries in traffic crashes	5,980	5,706	5,676	5,283	4,909	5,511	4,914	4,800
**Fatalities per 100 million VMT	.97	.94	.99	1.0	.94	.97	.87	.86
<i>Rural fatalities per 100 million VMT</i>	1.33	1.32	1.41	1.53	Pending	<i>Pending</i>	Pending	Pending
<i>Urban fatalities per 100million VMT</i>	.79	.76	.79	.77	Pending	<i>Pending</i>	Pending	Pending
**Unrestrained passenger vehicle occupant fatalities, all seat positions	207	193	224	183	Pending	<i>Pending</i>	181	179
**Fatalities in crashes involving a driver or motorcycle operator with a BAC .08+	236	256	261	255	Pending	<i>Pending</i>	253	250
**Speed-related fatalities	231	238	251	255	Pending	<i>Pending</i>	253	250
**Motorcyclist fatalities	137	118	138	138	Pending	<i>Pending</i>	137	135
**Unhelmeted motorcyclist fatalities	10	10	64	67	Pending	<i>Pending</i>	66	65
Drivers age 20 or younger in fatal crashes	157	152	137	130	Pending	<i>Pending</i>	112	102
**Pedestrian fatalities	128	138	130	148	Pending	<i>Pending</i>	147	146
Bicycle Fatalities	29	24	19	27	Pending	<i>Pending</i>	21	20
Safety belt use (daytime, observed)	95.2%	94.5%	93.6%	93.0%	93.3%	93.92%	98.0%	98.0%
Safety belt citations issued during grant-funded enforcement activities (FY)	11,880	12,662	17,701	15,772	16,496	14,902	No Goals	No Goals
Impaired driving arrests made during grant-funded enforcement activities (FY)	1,638	1,379	1,926	2,196	1,196	1,667	No Goals	No Goals
Speeding citations issued during grant-funded enforcement activities (FY)	5,296	4,246	4,451	4,175	5,061	4,646	No Goals	No Goals

FARS data used for fatalities, *State data files

**Predictions based on a trend analysis predictive model indicated these performance areas would increase in 2015-2017. In order to stop the trend, a one percent decrease was applied to each year.

Goals for 2015-2017 may change based on 2014 data when received.

**Traffic Safety Performance Measures for States and Federal Agencies
GHSA/NHTSA Recommended Standardized Goal Statements
Michigan Highway Safety Planning Goals 2015-2017**

Performance Measure Identifier	*Goal Statement
C-1	To decrease traffic fatalities 21 percent from the 2013 value of 951 to 750 by December 31, 2016.
C-2	To decrease serious ("A") traffic injuries 8 percent from the 2013 value of 5,283 to 4,850 by December 31, 2016.
C-3	To decrease fatalities/VMT 14 percent from the 2013 value of 1.00 percent to .86 percent by December 31, 2016.
C-4	**To decrease unrestrained passenger vehicle occupant fatalities in all seating positions 3 percent from the 2013 value of 192 to 186 by December 31, 2016.
C-5	**To decrease alcohol impaired driving fatalities in which a driver has at least a .08 BAC 3 percent from the 2013 value of 166 to 161 by December 31, 2016.
C-6	**To reduce speeding-related fatalities 3 percent from the 2013 value of 245 to 238 by December 31, 2016.
C-7	**To reduce motorcyclist fatalities 3 percent at the 2013 value of 128 to 124 by December 31, 2016.
C-8	**To reduce un-helmeted motorcyclist fatalities 5 percent at the 2013 value of 61 to 58 by December 31, 2016.
C-9	To reduce drivers age 20 or younger involved in fatal crashes 15 percent at the 2013 value of 131 to 111 by December 31, 2016.
C-10	**To reduce pedestrian fatalities 3 percent from the 2013 value of 149 to 145 by December 31, 2016.
C-11	**To reduce bicyclist fatalities 11 percent from the 2013 value of 27 to 24 by December 31, 2016.
B-1	To increase statewide observed seat belt use of front seat outboard occupants in passenger vehicles to 98 percent through December 31, 2016.

*The goals were established using a trend line-based analysis based on 2010-2014 data. A specific percent reduction was applied to each crash category based on the identified trends.

**Predictions based on a trend analysis predictive model indicated these performance areas would increase in 2015-2017. In order to stop the trend, a one percent decrease was applied to each year.

4. TRAFFIC SAFETY PARTNER INPUT

Input from traffic safety partners is critical to the development of the HSP and for selecting projects. OHSP constantly solicits feedback on how programs are working, which directions to pursue, and what new programs look promising.

The importance of external input cannot be overstated. Meetings, conferences, progress reports from grantees, and discussions in person, by telephone, and by email provide valuable information that works its way into OHSP programs. Simple conversations have led to significant improvements in programs that save lives, reduce costs, or improve efficiencies.

Governor's Traffic Safety Advisory Commission

Michigan is the only state in the nation to have had a state-level traffic safety commission in existence since the early 1940s. In 2002, the State Safety Commission and the Safety Management System were merged to create the Governor's Traffic Safety Advisory Commission (GTSAC). The membership of the Commission was also expanded to include representatives from local units of government.

The GTSAC consists of the Governor (or a designee); the Directors (or designees) of the Departments of Health and Human Services, Education, State, State Police, and Transportation, the Office of Highway Safety Planning, the Office of Services to the Aging, and three local representatives from the county, city, and township levels.

The GTSAC meets on a quarterly basis. Agenda development is a process open to traffic safety advocates within the state and is available through OHSP's Website (www.michigan.gov/ohsp-gtsac). Communication between GTSAC members and among traffic safety advocates throughout Michigan is also accomplished through the Website and an electronic state information delivery system that has more than 200 members. Members receive GTSAC and traffic safety news and information.

Strategic Highway Safety Plan

In December 2012 the GTSAC approved a statewide Strategic Highway Safety Plan (SHSP), which was signed by the Governor in February 2013. The SHSP identifies priority areas for GTSAC member agencies to address traffic safety efforts in the state. Each priority area includes an action team created to facilitate open communication, coordinate individual agency efforts, and keep progress moving forward toward achieving SHSP goals and objectives. OHSP staff participates in these action teams and incorporates information and recommendations into the Michigan Highway Safety Plan. Action plans are updated frequently to reflect emerging issues or completed action items.

Program Area Network Meetings

In addition to the GTSAC Action Teams, OHSP program staff serve as experts in specific traffic safety program areas and work with a network of partners across the state and nation to help generate ideas, highlight problems, and identify appropriate strategies to resolve them. This network of partners gives OHSP program staff the ability to determine where resources are available to leverage, which partners have the necessary ability or unique expertise, and whether model programs are working or not (and why) in Michigan communities.

Traffic Safety Summit

The annual Michigan Traffic Safety Summit is a two and one half day conference for traffic safety practitioners. The Summit is the state's central event for traffic safety information sharing. It allows OHSP and other partners to share promising ideas, solicit input and feedback from partners, and highlight best practice programs from local, state, and national levels.

Additional Planning Resources

OHSP consults a wide variety of resources for problem identification, priority setting, program selection, and grant awards. These ensure that Michigan is following best practices and using the most effective means of reducing deaths and injuries. Some of these resources include:

- The Michigan Department of State Police Strategic Plan and other state and local plans.
- National plans, priorities, and programs, including those from the United States Department of Transportation (USDOT), Federal Highway Administration (FHWA), and the National Highway Traffic Safety Administration (NHTSA).
- The NHTSA publication "Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices."
- NCHRP Report 622, "Effectiveness of Behavioral Highway Safety Countermeasures."
- The NHTSA publication "Traffic Safety Performance Measures for States and Federal Agencies." (DOT 811 025)

- The GHSA publication “Guidelines for Developing Highway Safety Performance Plans.”
- The NHTSA publication “The Art of Appropriate Evaluation: A Guide for Highway Safety Program Managers.” (DOT HS 811 061)
- The UMTRI publication “Evaluating Traffic Safety Programs: A Manual for Assessing Program Effectiveness.”
- The NHTSA publication “HSP Review Content Guide” updated in 2015.
- American Association of State Highway and Transportation Officials (AASHTO), Transportation Research Board (TRB), and Association of Transportation Safety Information Professionals (ATSIP) publications and conferences.
- Michigan Strategic Highway Safety Plan 2013-2016
- Academic publications and research reports.
- Staff participation on committees and associations, including: GTSAC Action Teams, Michigan Association of Chiefs of Police, Prevention Network, Michigan Coalition to Reduce Underage Drinking, the Michigan Deer Crash Coalition, regional Traffic Safety Committees, Michigan Sheriff’s Association, and state-level associations.
- Feedback from grantees during the implementation, monitoring, and evaluation of traffic safety projects.
- Input provided by the general public.
- OHSP staff attendance at state, regional, and national conferences and seminars to network and learn about developing tools, trends, countermeasures, and programs.
- Michigan Driver and Traffic Safety Education Association

5. BUDGET DEVELOPMENT

An estimated HSP budget is prepared as staff members begin drafting their program area plans and funding requests. The budgeting process takes into account prior year funding and carry-forward amounts for each funding source along with new and existing funding sources. This budget serves as the basis for allocating funding requests among the various traffic safety programs. The HSP management team considers the merits of funding requests along with the level of program funding from previous years, funding of other related programs, special funding sources, and office wide long-range goals before approving budgets for each program area. Strategies are reviewed to determine which should be fully funded, which can proceed with amendments, and which are not feasible. This process can shift the initial budget requests between program areas to accommodate essential and/or promising projects that warrant special support.

Exhibits 3, 4, and 5 illustrate the projected sources of funding, program level budgets, and the distribution of funding by type.

EXHIBIT 3: Unrestricted Program Funding Sources, FY 2016

State General Fund	Section 402	Section 402 Carry Forward
\$593,000	\$8,690,000	\$1,200,000

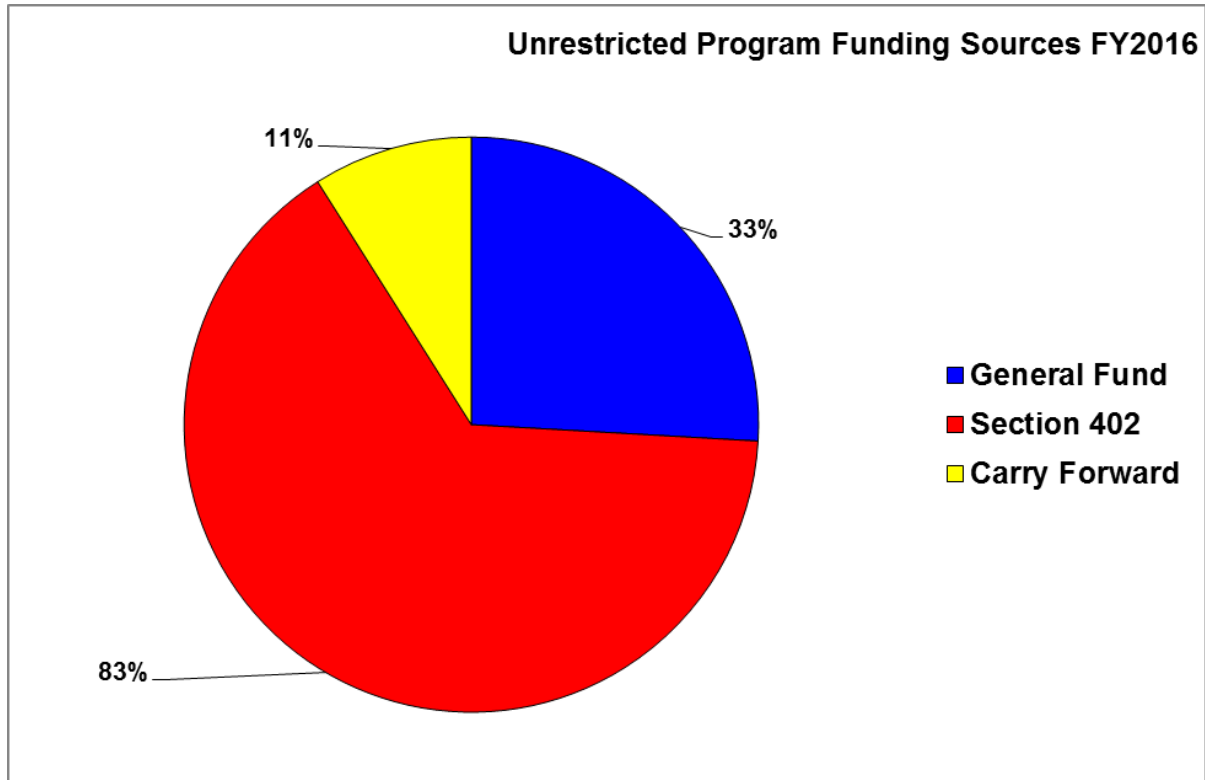


EXHIBIT 4: Restricted Program Funding Sources, FY 2016

405(b) Occupant Protection	405(c) Traffic Records	405(d) Impaired Driving Prevention	405(f) Motorcycle Safety
\$3,240,000	\$1,974,000	\$5,774,000	\$180,000

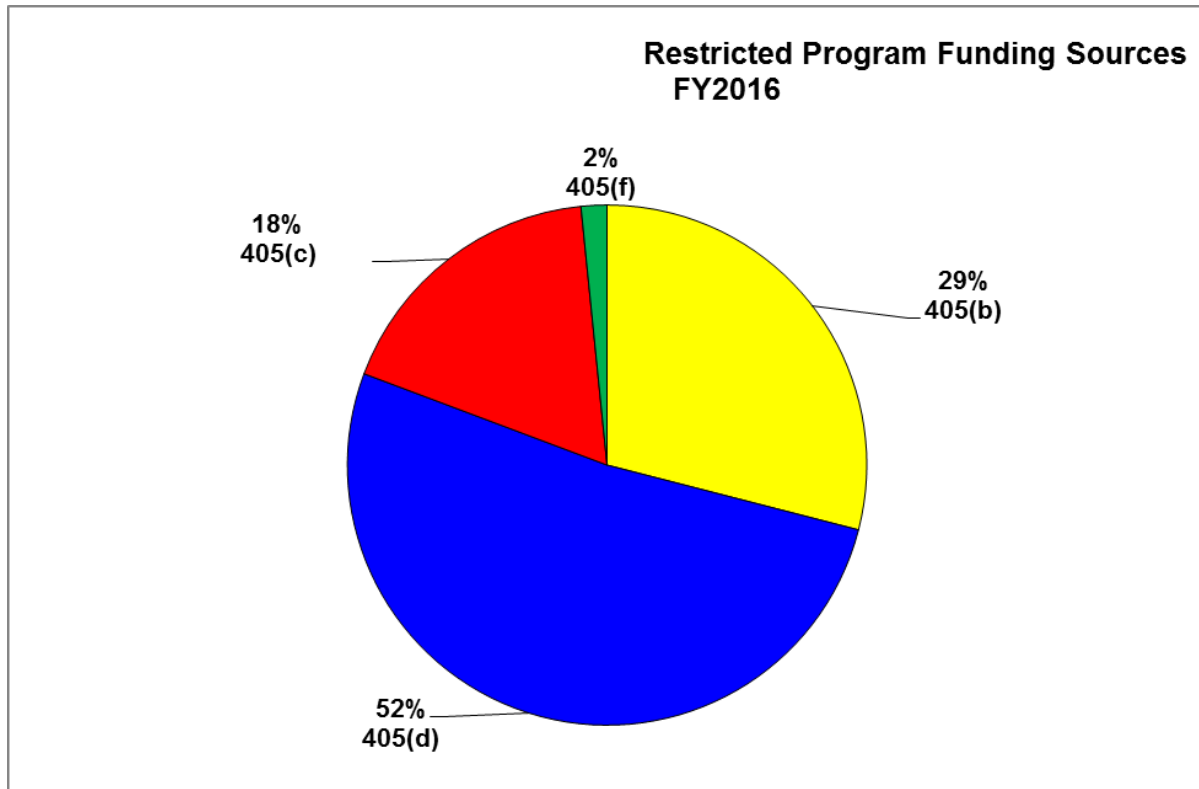


EXHIBIT 5: Program Budgets, FY 2016

Impaired Driving Prevention	Occupant Protection	Police Traffic Services	Planning and Administration
\$3,790,000	\$1,142,000	\$9,814,000	\$1,261,000

Traffic Records	Motorcycle Safety	*Other Programs
\$2,785,000	\$889,000	\$770,000

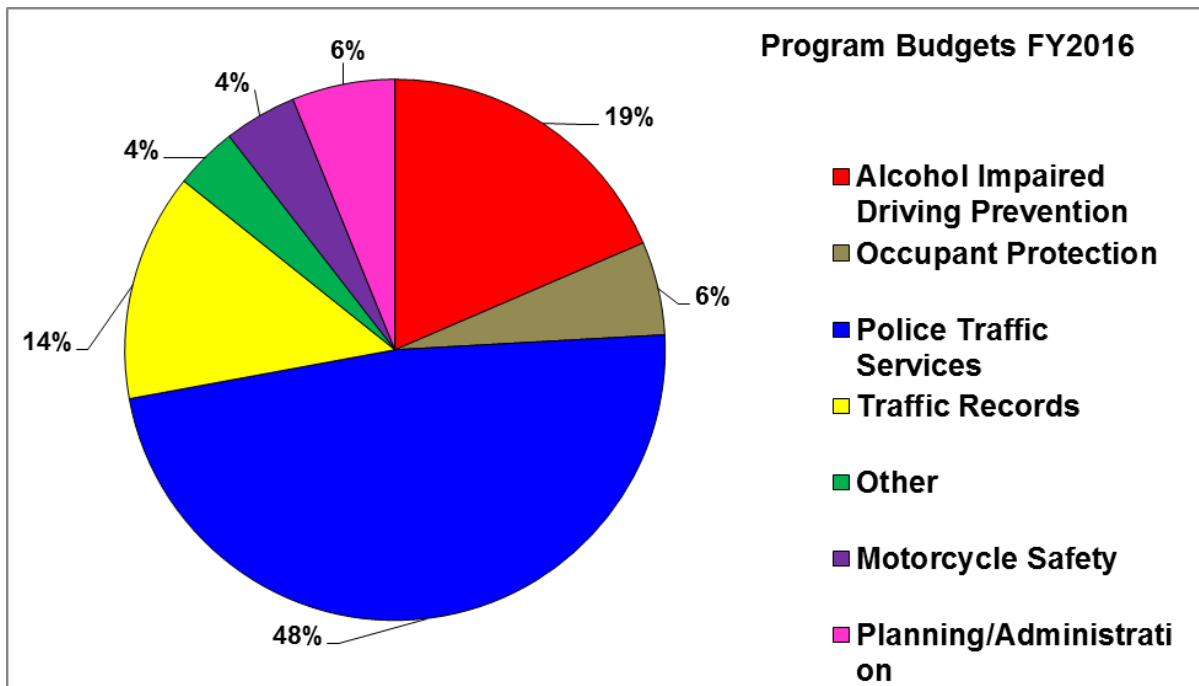
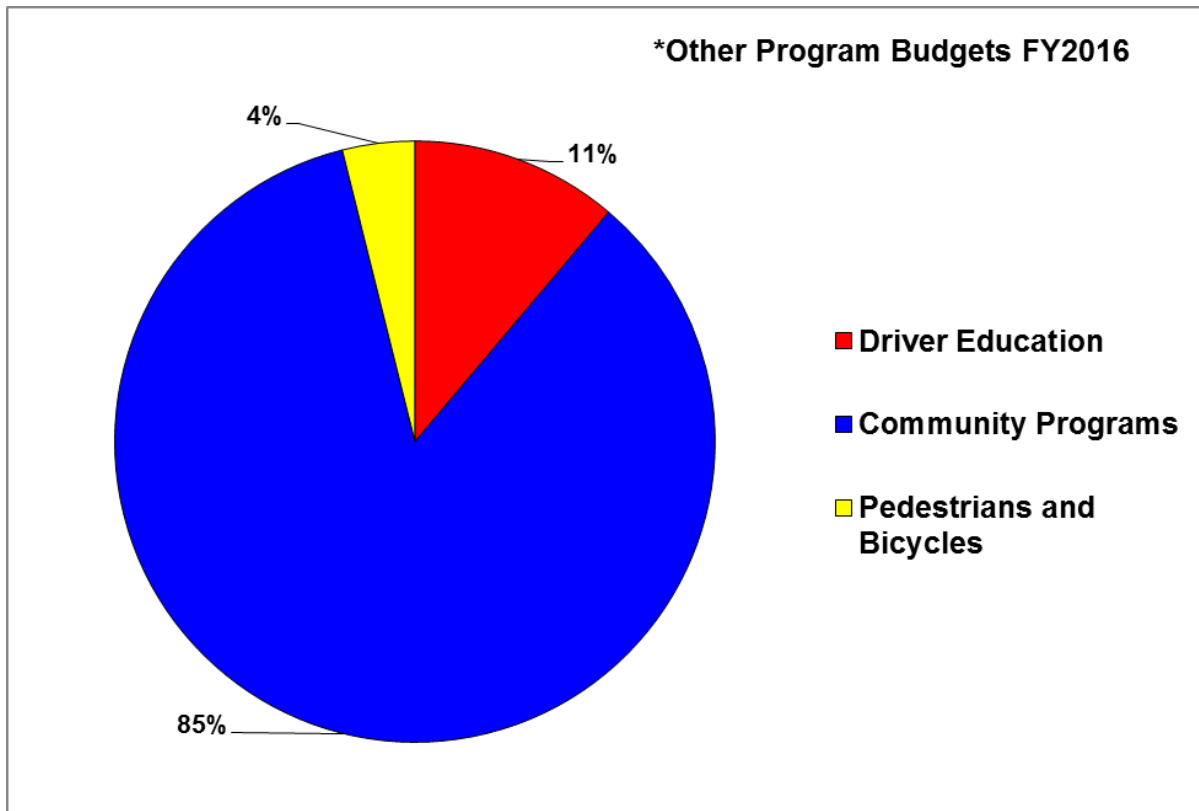


EXHIBIT 6: *Other Program Budgets, FY 2016

Pedestrians and Bicycles	Community Programs	Driver Education
\$30,000	\$654,000	\$86,000



6. PROJECT SELECTION

Projects are selected based on the potential for impacting traffic safety problems and moving Michigan toward achieving statewide traffic safety goals.

Determining which projects to pursue precedes grant solicitation, derived from problem identification. The problems to address, target areas, and appropriate countermeasures are selected in advance, usually in consultation with potential grantees, but not dependent on volunteers or proposals from the field.

For research-based projects OHSP sends out requests for proposals (RFP). RFP's are distributed to an approved list of university and not-for-profit research agencies. Until selected, the grantee is denoted in the HSP as "To Be Determined" (TBD). Once a grantee is selected, the HSP is revised to reflect the name of the agency awarded the project.

OHSP actively seeks out grantees in problem areas with particular expertise.

When recommending programs, OHSP program staff considers:

- the population to be reached
- the extent of the problem in the target population
- supporting data
- where and when implementation must take place
- the expected effectiveness of the proposed project
- which partners are available and competent to implement projects
- the most efficient and effective means of implementing the program
- available funding sources

In some instances, programs such as training, public information, and mobilization campaigns are most effectively coordinated at the state level. OHSP oversees these programs. Some projects must take place at the local level where the community experiencing the problem will have unique competence in addressing its causes.

Grant Development Plans

Following project selection and dialogue with OHSP leadership about traffic safety priorities, staff prepares the grant development plans (GDPs). The GDP assists in ensuring sufficient preparations are made before grant development and project implementation begin, and it also serves as documentation for the program area. OHSP staff develop GDPs as a team effort where projects cross network areas, and serve as valuable internal planning tools.

Each GDP contains:

- specific information about the strategy the project will pursue
- potential grantees
- funding levels and sources
- goals and objectives
- project schedules

Exhibit 7 is an example of the GDP form.

EXHIBIT 7: FY2016 Grant Development Form

Grant Development Plan

due April 11, 2015

Strategy Name**Background/Problem Statement****Program Goal(s) (HSP)****Project Goal(s) (AER)****Project Description(s)(AER)****Impact Statement** (*What will happen if we do not have this program?*)**Funding Recommendation****Information sources and partners consulted****How will this strategy be achieved? Why was this strategy selected? How will the program be evaluated for effectiveness?**

Year of funding?		Will the strategy continue next year?	Y N
Expected grantee		Estimated budget	
October 1 start-up required?	Y N	Split-funded from FY2015?	Y N
Seed-funding grant needing post-OHSP continuation plan?	Y N	If so, does it have one?	Y N
Funds for Program Management Section in-house grant?	Y N	Funds for Communication Section in-house grant?	Y N
For the benefit of locals?	Y N	PI&E materials being made?	Y N
Contractual costs?			Y N
Personnel costs?			Y N
Indirect costs?	Y N	If so, indirect rate	
Program income?	Y N	If so, how much?	
Any equipment?	Y N	If so, matching funds	
Equipment over \$5,000 per item?	Y N	If so, matching funds	
Out-of-state travel?	Y N	If so, purpose of travel?	
SHSP Strategy?	Y N	Ad board approval	Y N

Additional Notes

Funding Source	Amount	Funding Source	Amount
	\$		\$

Author
ApprovalDate
Date

Following development of the GDPs, OHSP program staff meet with the HSP management team to discuss their plans for the next fiscal year using their GDPs as the basis for this discussion. These discussions begin with an overview of the traffic crash data and problem identification followed by an overview of the GDPs selected to address the identified problems. This presents an opportunity for back-and-forth questioning and discussion, bringing out detail and emphasis that might be lost in the pages of text.

Management Team Review

The HSP management team reviews the material presented for final selection of the grant projects that will receive funding. This summarizes the list of factors staff consider in the programs and recommendations, providing an office-wide rather than program area-specific perspective. In this way, greater attention can be placed on budget limitations and on balancing demands and opportunities in various program areas.

Grant development begins with final GDP approval. In addition, OHSP staff share their list of projects with one another to become more aware of plans and partnership opportunities in other program areas.

Telephone Survey Results

May 10	Jun 10	Aug 10	May 11	Jun 11	July 11	Aug 11	May 12	Jun 12	July 12	Sep 12	Apr 13	Jun 13	July 13	Sep 13	Feb 14	Apr 14	Mar 15	Apr 15
7	2	11	9	6	8	10			27	8			16	33	41		55	90
"In the past 30 days, have you seen or heard of any special effort by police to arrest drivers in your community for drunk driving?": "Yes"																		
23	27	31	25	16	30	32			31	33			70	70	61		266	267
"If you drove after having too much to drink and be able to drive safely, how likely are you to be stopped by a police officer?": "Almost certain", "Very likely," or "Somewhat likely"																		
75	65	71	64	62	61	59			72	74			70	72	384	374	378	389
"When driving this vehicle, how often do you wear your safety belt?" : "All the time" & "When was the last time you did NOT wear your safety belt while driving?": "I always buckle my seat belt" or "More than one year ago" (always buckles up)																		
92	94	94	94	97	96	94	90	89	88	87	97	97	98	98	388	391	392	389
"When driving this vehicle, how often do you wear your safety belt?": "Most of the time" or "All the time" (almost always buckles up)																		
95	94	96	94	97	96	94	97	97	97	98	99	99	99	99	41	54	48	72
"In the past 30 days, have you seen or heard of any special effort by police to ticket drivers in your community for safety belt violations?": "Yes"																		
30	31	31	12	38	38	31	9	22	31	33	11	12	31	31	231	234	236	276
"Assume for a moment that you do not use your safety belt AT ALL while driving over the next six months. What are the chances you will receive a ticket for NOT wearing a safety belt?": "Very" or "Somewhat likely"																		
31	73	51	75	74	60	66	67	34	66	47	63	63	69					
"When you drive on a local road that has a speed limit of 20 mph, how often would you say you drive faster than 35 miles per hour?": "Most of the time" or "half the time"																		
20	20	15	7	58	15			14	14									
"When you drive on a freeway with a speed limit of 70 mph, how often do you drive faster than 75 miles per hour?" : "Most of the time" or "half the time"																		
36	36	36	18	36	36			33	33									
"If you drove 10 miles per hour over the speed limit on a freeway, would you say your chances of getting a ticket would be very likely, somewhat likely, somewhat unlikely or very unlikely?": "very likely, somewhat likely"																		
68	69	68	33	68	68			65	65									
"In the past 60 days, have you read, seen, or heard anything about speed enforcement by the police?": "Yes"																		
27	28	26	50	26	26			20	20									

Surveys were of 400 Michigan drivers. The four Traffic Safety Performance Measures survey questions on speed were not asked before being added to a 500-driver survey in 2009. Note that the safety belt use question appears twice. The first line is "always," the second is "usually." "Always" is double-filtered: drivers were first asked how often they wear their belts, and if they report "always," they were asked when they last failed to wear it; if that was any time in the past year, they were counted as "usually" rather than "always."